Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A device for guiding at least two flow media having different pressures, comprising a shaft or similar force-transmitting member and a pressure-insulating element ~~such as a housing~~ surrounding the shaft or similar, characterized in that areas (90, 90_a; 96; 98) which lie next to one another in the direction of the axis are defined between the force-transmitting member (10) and the pressure-insulating element by ~~means of~~ sealing elements (70, 70_a), wherein at least one of the sealing elements (70, 70_a) is designed to be leakage-free and two areas (90, 90_a; 98) for fluids (A, B) having different pressures flank an area (96) for an auxiliary liquid (H), and a conveying device (100) for subdividing the latter area (96) ~~is subdivided by means of a device (100)~~ into two partial areas (96_a, 96_b) ~~for~~ defining two different pressure regions, the conveying device (100) is arranged within the partial areas for generating a pressure difference between the partial areas (96_a, 96_b).

2. (previously presented) The device as claimed in claim 1, wherein a magnetofluidic sealing element (70, 70_a) is provided for delimiting the area (96) for the auxiliary liquid (H).

3. (previously presented) The device as claimed in claim 1, wherein a conveying medium is assigned to the higher-pressure area (90_a) and ambient air is assigned to the low-pressure area (98).

4. (previously presented) The device as claimed in claim 2, wherein the auxiliary liquid (H) is a carrier oil of the magnetofluid assigned to the sealing element (70, 70_a),

optionally a silicone oil.

5. (previously presented) The device as claimed in claim 1 wherein the area (96) for the auxiliary liquid (H) has two connections (33), one of which is designed to generate a vacuum and the other of which is designed as a passage for the auxiliary liquid (H).

6. (previously presented) The device as claimed in claim 1 wherein the partial area (96_a) for the higher pressure of the auxiliary liquid (H) is assigned to the area (90_a) for the fluid (A) having a higher pressure (Figs. 18 to 20).

7. (canceled).

8. (previously presented) The device as claimed in claim 1, including geometric parts which can be moved relative to one another and are assigned to the pressure-insulating element and to the force-transmitting member (10), said parts forming a conveying device for the auxiliary liquid (H) so as to generate a pressure difference.

9. (canceled).

10. (previously presented) The device as claimed in claim 1, wherein the pressure difference which can be generated corresponds at least to the maximum pressure difference which occurs between the fluids (A, B).

11. (currently amended) The device as claimed in claim 10, including means ~~are provided by which~~ for adjusting the pressure difference between the maximum pressure of the auxiliary liquid and the pressure of the fluid having the higher pressure ~~can be adjusted~~ to zero~~, members for adjusting the power of the means which generate the pressure difference~~.

12. (previously presented) The device as claimed in claim 11, including members (97, 99) for adjusting a return flow from the higher-pressure partial area (96_a) of the auxiliary liquid (H) to the low-pressure partial area (96_b), wherein a line (99) with a valve-type overflow device (97) is optionally provided between the partial areas (96_a, 96_b) for the auxiliary liquid (H).

13. (previously presented) The device as claimed in claim 1, wherein the volume of at least the area (96) for the auxiliary liquid (H) is designed to be variable.

14. (previously presented) The device as claimed in claim 6, wherein at least the partial area (96_b) for the low-pressure region of the auxiliary liquid (H) is configured with a variable volume.

15. (previously presented) The device as claimed in claim 1, including membrane-type sealing elements for delimiting the area (96) for the auxiliary liquid (H).

16. (previously presented) The device as claimed in claim 15, wherein a magnetofluidic sealing element (70, 70_a) extends on either side of the area (96) for the auxiliary liquid (H) between the force-transmitting member (12) and the pressure-insulating element (24).

17. (previously presented) The device as claimed in claim 16, wherein the sealing element (70, 70_a) contains at least one permanent magnet (74) in a ring (76) and also a magnetofluid (75) assigned to the force-transmitting member or to the shaft (10) at an annular gap (77).

18. (currently amended) The device as claimed in claim 17, wherein the permanent magnet (74) forms part of a magnetic seal (70) which forms the sealing element, said magnetic seal surrounding the shaft (10) with the ring (76), wherein the magnetic field of the annular permanent magnet (70) is

optionally concentrated on the annular gap (77) by ~~means of~~ associated pole shoes (73).

19. (previously presented) The device as claimed in claim 17, including permanent magnets (70) magnetized in the direction of the axis on the high-pressure side in a carrier ring or lock ring (60) made of non-magnetic material, or by at least two concentric magnetic seals (70, 70_a), the cross sections of which are separated by at least one axis-parallel spacer ring (79).

20. (previously presented) The device as claimed in claim 19, wherein a bellows (68) bears against the lock ring (60), said bellows bearing on the other side against the pressure-carrying element.

21. (previously presented) The device as claimed in claim 20, wherein the bellows (68) is made of metallic material and is preferably surrounded by a retaining ring (56) on its radial outer side, and/or is supported against a front ring (54) fixed to the housing bushing (26).

22. (previously presented) The device as claimed in claim 19, wherein the lock ring (60) contains at least one sealing disk (80) as part of a mechanical sealing system which comprises at least two sealing disks (80, 80_a) with a central opening (82), wherein the sealing disk (80, 80_a) is optionally molded from silicon carbide.

23. (previously presented) The device as claimed in claim 22, wherein the sealing disks (80, 80_a) bear against one another with contact faces (84), wherein optionally at least one sealing disk (80_a) has spiral grooves or depressions (86) of small depth (c) which run in a curved manner in the contact face (84) from the disk edge (81) toward the disk center, said grooves or depressions ending at a distance from the central opening (82) and being covered by the contact face of the other sealing disk (80).

24. (previously presented) The device as claimed in claim 1, wherein at least one shaft sleeve (12), which surrounds the shaft (10), and a housing bushing (26) which is coaxial thereto are in each case made of a non-magnetic material, and at least two of the magnetofluidic sealing elements (70, 70_a) which surround the shaft are provided between said shaft sleeve and said housing bushing.

25. (previously presented) The device as claimed in claim 24, wherein O-rings (20) provide static sealing of the shaft sleeve (12) with respect to the shaft (12) and of the housing bushing (26) with respect to the housing.

26. (currently amended) The device as claimed in claim 24 wherein the force-transmitting member or the shaft sleeve (12) and the pressure-insulating element or the housing bushing (26) are held at a defined axial spacing and such that they can rotate concentrically by ~~means of~~ roller bearings (52) arranged radially with respect to the longitudinal axis (M_1) of the shaft sleeve~~, in particular by means of a double angular contact ball bearing~~.

27. (previously presented) The device as claimed in claim 26, wherein the roller bearing (52) bears against an outer ring (16) of the shaft sleeve (12), with one of the sealing disks (80_a) made of silicon carbide being assigned to the other side thereof.

28. (previously presented) The device as claimed in claim 22, wherein one sealing disk (80_a) is mounted in a section (51) of the annular space (50) which widens in steps in the axial direction away from the outer ring (16), said section being assigned the lock ring (60) comprising the other sealing disk (80).

29. (previously presented) The device as claimed in claim 2,

wherein a shaft (10) made of ferromagnetic material.

30. (previously presented) The device as claimed in claim 22, wherein a radial gap (17) runs between the outer face of the sealing disk (80) and the adjacent lock ring (60).

31. (previously presented) The device as claimed in claim 30, wherein the radial gap (17) is adjoined on one side by an axial annular gap (77) between the shaft (10) and the sealing elements (70) and on the other side by an axial annular gap (13) which passes below the adjacent sealing disk (80), and/or in that a stop face (69) is provided at the radially outer end of the radial gap (17), said stop face being adjoined by an outer annular gap (21) which runs in an axis-parallel manner (Fig. 5).

32. (currently amended) The device as claimed in claim 31, wherein the sealing disk (80) is connected to the center wall (63) of the lock ring (60) by ~~means of~~ at least one axis-parallel drive pin (67).

33. (previously presented) The device as claimed in claim 1, wherein a chamber (90) which is partially filled with a gas (G) and is provided with a sealing gap (92) is arranged in front of the side acted upon by a fluid.

34. (previously presented) The device as claimed in claim 33, wherein the chamber (90) which is partially filled with a gas (G) and is provided with a sealing gap (92) is arranged in front of the magnetofluidic sealing element (70) on the carrier ring or lock ring (60) (Fig. 17).

35. (previously presented) The device as claimed in claim 33 wherein a width (q_3) of the sealing gap (92) is greater than a width (q_2) of the sealing element (70) of the sealing gap (77) on the carrier ring or lock ring (60) with respect to the shaft (10), wherein optionally the ratio between the width (q_2) of the sealing gap (77), the width (q_3) of the sealing gap (77) of the

chamber (90) and also the internal outer diameter (f_2) of the chamber (90) or the outer chamber wall (94) is 1 to 1.2 to 1.5.

36. (previously presented) The device as claimed in claim 33, wherein a cross section of the chamber (90) is widened toward the outside (Fig. 17).

37. (previously presented) The device as claimed in claim 33, wherein an auxiliary connection for inert gas is assigned to the chamber (90).

38. (currently amended) A method for guiding at least two flow media having different pressures, comprising a shaft or similar force-transmitting member and a pressure-insulating element ~~such as a housing~~ surrounding the shaft or similar, ~~in particular using a~~ by the device as claimed in ~~at least one of the preceding claims~~ claim 1, characterized in that, between the force-transmitting member (10) and the pressure-insulating element, fluids (A, B) having different pressures are held in areas (90, 90_a; 98) which are in each case delimited by a sealing element (70, 70_a), and between said areas at least one auxiliary liquid (H) is held in an area (96), wherein two different pressure regions are established in the latter and the partial area for the higher pressure of the auxiliary liquid (H) is assigned to the area (90_a) for the fluid (A) having a higher pressure.

39. (currently amended) The method as claimed in claim 38, including sealing the area (96) for the auxiliary liquid (H) by ~~means of~~ magnetofluidic sealing elements (70, 70_a) on either side with respect to the areas (90, 90_a; 98) for the fluids (A, B).

40. (previously presented) The method as claimed in claim 39, wherein the area (96) for the auxiliary liquid (H) is acted upon by a vacuum in front of said liquid.

41. (previously presented) The method as claimed in claim 38,

wherein a conveying medium is assigned to the higher-pressure area (90, 90_a) and ambient air is assigned to the low-pressure area (98).

42. (currently amended) The method as claimed in claim 38, wherein the pressure difference which can be generated corresponds at least to the maximum pressure difference which occurs between the fluids (A, B), or ~~in that~~ adjusting the power of the means ~~which generate~~ for generating the pressure difference ~~is adjusted~~.

43. (previously presented) The method as claimed in claim 38, wherein a return flow from the higher-pressure partial area (96_a) of the auxiliary liquid (H) to the low-pressure partial area (96_b) is adjusted.

44. (previously presented) The method as claimed in claim 38, wherein the pressure difference within the auxiliary liquid (H) is generated by the relative movement of geometric elements which are assigned to the shaft (10) on the one hand and to the pressure-insulating element on the other hand and form a conveying device (100).

45. (currently amended) The method as claimed in claim 38, wherein a conveying effect for the auxiliary liquid (H) is created by ~~means of~~ sealing disks (80, 80_a) which between them delimit spiral grooves or depressions (86), wherein optionally the conveying effect of the sealing disks (80, 80_a) is increased by increasing the pressure thereof and also the distance thereof with respect to one another.

46. (currently amended) The method as claimed in claim 38, wherein, in a chamber (90) which is arranged in front of the sealing element (70) and contains a gas, the gas volume during operation collects concentrically around the shaft (10) in the region of the sealing gap (77) between the sealing element and said shaft, and is compressed by ~~means of~~ the operating

pressure.

47. (new) A device for guiding at least two flow media having different pressures, comprising a shaft or similar force-transmitting member and a pressure-insulating element surrounding the shaft or similar, characterized in that areas (90, 90_a; 96; 98) which lie next to one another in the direction of the axis are defined between the force-transmitting member (10) and the pressure-insulating element by magnetofluidic sealing elements (70, 70_a), wherein at least one of the sealing elements (70, 70_a) is designed to be leakage-free and two areas (90, 90_a; 98) for fluids (A, B) having different pressures flank an area (96) for an auxiliary liquid (H), and a conveying device (100) for subdividing the latter area (96) into two partial areas (96_a, 96_b) defining two different pressure regions, the conveying device (100) is arranged within the partial areas for generating a pressure difference between the partial areas (96_a, 96_b), wherein the at least one magnetofluidic sealing element delimits the area (96) for the auxiliary liquid (H).

48. (new) A device for guiding at least two flow media having different pressures, comprising a shaft or similar force-transmitting member and a pressure-insulating element surrounding the shaft or similar, characterized in that areas (90, 90_a; 96; 98) which lie next to one another in the direction of the axis are defined between the force-transmitting member (10) and the pressure-insulating element by magnetofluidic sealing elements (70, 70_a), wherein at least one of the magnetofluidic sealing elements (70, 70_a) is designed to be leakage-free and two areas (90, 90_a; 98) for fluids (A, B) having different pressures flank an area (96) for an auxiliary liquid (H), and a conveying device (100) for subdividing the latter area (96) into two partial areas (96_a, 96_b) defining two different pressure regions, the conveying device (100) is arranged within the partial areas for generating a pressure difference between the partial areas (96_a, 96_b), wherein the at least one magnetofluidic sealing element delimits the area (96)

for the auxiliary liquid (H) and wherein the pressure difference which is generated corresponds at least to the maximum pressure difference which occurs between the fluids (A, B).